

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 3 AND MD 424 /CONWAY ROAD IN ANNE ARUNDEL COUNTY. THE WORK IS NECESSITATED BY THE WIDENING OF NORTHBOUND AND SOUTHBOUND MD 3 AND WILL CONSIST OF THE REPLACEMENT OF A STRAIN POLE, DETECTION, AND SIGNAL HEADS. MD 3 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

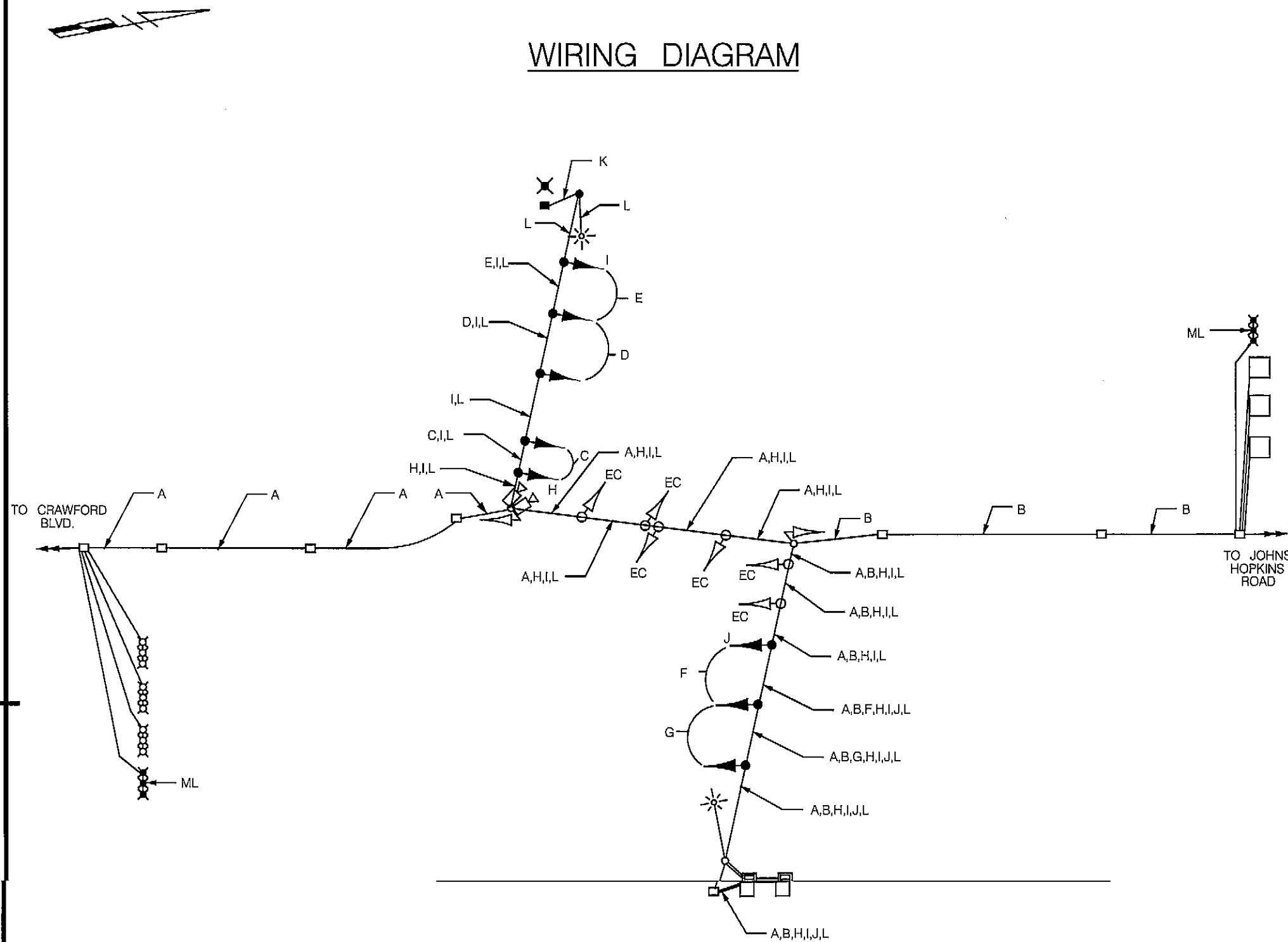
INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA SIX-PHASE, FULLY-TRAFFIC-ACTUATED MODE WITH LEAD /LAG EXCLUSIVE LEFT TURN PHASES FOR NORTHBOUND AND SOUTHBOUND MD 3 AND SIDE STREET SPLIT PHASING. THIS WILL NOT CHANGE.

CONTROLLER REQUIREMENTS

THE EXISTING EIGHT-PHASE, FULLY-ACTUATED CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED.

WIRING DIAGRAM



WIRING KEY

- A,B MICRO-LOOP PROBE LEAD-IN
C-G 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
H-J 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
K STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
L 2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
ML MICRO-LOOP PROBE
X GROUND ROD
EC EXISTING CABLE

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY	DESCRIPTION
LS	MAINTENANCE OF TRAFFIC
1 CY	TEST PIT EXCAVATION
25 LF	24 IN. WHITE HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
LS	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT
10 LF	3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
20 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
1 EA	ELECTRICAL HANDHOLE
85 LF	ELECTRICAL CABLE 5 - CONDUCTOR (NO. 14 AWG)
895 LF	ELECTRICAL CABLE 7 - CONDUCTOR (NO. 14 AWG)
475 LF	ELECTRICAL CABLE 2 - CONDUCTOR (NO. 12 AWG)
100 LF	STEEL SPAN WIRE - 1/4 IN. DIAMETER
100 LF	STEEL SPAN WIRE - 3/8 IN. DIAMETER
5 CY	CONCRETE FOR SIGNAL FOUNDATION
1 EA	GROUND ROD - 3/4" X 10'
1 EA	12 IN. X 30 FT. 2-PLY STEEL STRAIN POLE
2 EA	R3-SL SIGN (30"x36") - SPAN WIRE MOUNT
2 EA	MICRO-LOOP PROBE SET WITH 1000 FT. LEAD-IN
25 LF	1 IN. LIQUID TIGHT, FLEXIBLE, NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
130 LF	SAW CUT FOR LOOP DETECTOR
18 EA	12 IN. L.E.D. SIGNAL HEAD SECTION
2 EA	TEMPORARY BACK - GUY
2 EA	RELOCATE EXISTING SIGNAL HEAD
1 EA	15 FT. STREET LIGHTING ARM WITH 250 WATT HPSV LUMINAIRE

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

MRS. KIM TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 841-1003

MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 841-1002

MR. JOE HORTY
ASSISTANT DISTRICT ENGINEER - UTILITIES
(410) 841-1005

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

MR. EUGENE BAILEY
CHIEF SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

MS. DARLENE EIDE
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
CHIEF SIGNAL OPERATIONS
(410) 787-7652

PHASING CHART

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G

PHASE 2 + 5	←R→	←R→	←R→	R	R	R	←G→	←G→	←G→	G	G	G	R	R	R	R
5 CHANGE	←R→	←R→	←R→	R	R	R	←Y→	←Y→	←Y→	G	G	G	R	R	R	R
PHASE 2 + 6	←R→	←R→	←R→	G	G	G	←R→	←R→	←R→	G	G	G	R	R	R	R
2 + 6 CHANGE	←R→	←R→	←R→	Y	Y	Y	←R→	←R→	←R→	Y	Y	Y	R	R	R	R
PHASE 1 + 6	←G→	←G→	←G→	G	G	G	←R→	←R→	←R→	R	R	R	R	R	R	R
1 CHANGE	←Y→	←Y→	←Y→	G	G	G	←R→	←R→	←R→	R	R	R	R	R	R	R
PHASE 3	←R→	←R→	←R→	R	R	R	←R→	←R→	←R→	R	R	R	←G→	G	R	R
3 CHANGE	←R→	←R→	←R→	R	R	R	←R→	←R→	←R→	R	R	R	Y	Y	R	R
PHASE 4	←R→	←R→	←R→	R	R	R	←R→	←R→	←R→	R	R	R	R	←G→	G	G
4 CHANGE	←R→	←R→	←R→	R	R	R	←R→	←R→	←R→	R	R	R	R	Y	Y	Y
FLASHING OPERATION	FLR	FLR	FLR	FLY	FLY	FLY	FLR	FLR	FLR	FLY	FLY	FLY	FLR	FLR	FLR	FLR

TRAFFIC CONCEPTS, INC.

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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION PLAN
MD 3 AND MD 424 /CONWAY ROAD

SCALE NONE DATE 8-1-09 CONTRACT NO. BW 996M82

DESIGNED BY T. ZAYDEL COUNTY ANNE ARUNDEL
DRAWN BY T. ZAYDEL LOGMILE 02000302.21
CHECKED BY K. SCHMID T.I.M.S. NO.
F.A.P. NO. N/A TOD NO.

DRAWING NO. TS-160 K GI SHEET NO. 2 OF 2

FILE PATH: M:\1700\1774\Signals\7-17-09 Final Plans\dgn\MD 424\SIGNAL.dgn
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